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(71) Applicant and

(72) Inventor: SOMEUS, Edward [HU/HU]; Széchenyi u. 59,
H-1222 Budapest (HU).

(74) Agent: KORMOS, Ágnes; Váci út 66., H-1132 Budapest
(HU).

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WO 2004/112462 A1 (54) Title: SOLID CARRIER BASED MICROBIAL INOCULANTS AND METHOD FOR MANUFACTURING OF SUCH
PRODUCT

(57) Abstract: The scope of invention is solid carrier-based microbial inoculants advantageously applied for natural phosphorous supply of plant, biological control of soil born plant pathogens, biological degradation of organic contaminants, soil life and fertility improvement which solid carrier containing phosphorus, made of animal bone charcoal, and having grain size advantageously between 0,001 mm and 10 mm, pore size between 10 and 60,000 nanometer, macro porous structured, the specific area is between 1 and 500 m²/g, and the external and/or internal surface and/or internal pores are biologically active colonized with soil microorganisms. Furthermore the scope is method for manufacturing and application of solid carrier-based microbial inoculants which carrier is produced from animal bone by carbonisation process over 300 degrees Celsius core temperature, followed by cooling to below 50 degrees Celsius core temperature, then the microbial inoculants - produced by conventional liquid phase fermentation - are introduced on and in the phosphorous content solid carrier external, internal surfaces and internal pores, advantageously by solid state fermentation process resulting microbiological colonization, then the water content of the microbial product is decreased to achieve long time storage for preserving the viability of the microorganisms; and before field introduction the microorganisms are activated by water and/or nutrient additives.